Claims

[c1]   What is claimed is:

1. An updating system for a digital player comprising:

a primary module comprising a first memory module for storing software; and

a secondary module comprising a second memory module and said primary module;

wherein an updating instruction is sent from said primary module to said secondary module to activate a predetermined program for updating said second memory module by means of said software stored in said first memory module.

[c2]   2. The updating system of claim 1, wherein said digital player is a DVD player.

[c3]   3. The updating system of claim 1, wherein said primary module is a MPEG device.

[c4]   4. The updating system of claim 1, wherein said first memory module is a random access memory.

[c5]   5. The updating system of claim 1, wherein said secondary module is a loader device.

[c6]   6. The updating system of claim 1, wherein said second memory module is a flash memory.

[c7]   7. The updating system of claim 1, wherein said primary module is connected with said secondary module via a bus.

[c8]   8. The updating system of claim 7, wherein said bus is an IDE bus.

[c9]   9. The updating system of claim 1, wherein said updating instruction set and said predetermined program are both in compliance with ATAPI protocol.

[c10]   10. An updating method for a digital player, said digital player comprising a primary module comprising a first memory module, and a secondary module comprising a second memory module and said primary module, the method comprising:

placing a disk carrying software into said secondary module;

reading said software from said secondary module and storing said software in said first memory module of said primary module; and

sending an updating instruction from said primary module to said secondary module to activate a predetermined program for updating said second memory module by means of said software.

[c11]   11.The updating method of claim 10, wherein said primary module is a MPEG device.

[c12]   12.The updating method of claim 10, wherein said first memory module is a random access memory.

[c13]   13.The updating method of claim 10, wherein said secondary module is a loader device.

[c14]   14.The updating method of claim 10, wherein said second memory module is a flash memory.

[c15]   15.The updating method m of claim 10, wherein said primary module is connected with said secondary module via a bus.

[c16]   16.The updating method of claim 15, wherein said bus is an IDE bus.

[c17]   17.The updating method of claim 10, wherein said digital player is a DVD player.

[c18]   18.The updating method of claim 10, wherein said updating instruction set and said predetermined program are both in compliance with ATAPI protocol.

[c19]
19.A digital player device capable of automatically updating data, said data updating being accomplished by means of a disk carrying a first software module and a second software module, said digital player device comprising:

a primary module comprising a primary memory module, a first buffer module, and a first flash memory module; and

a secondary module comprising a second buffer module and a second flash memory module;

wherein said secondary module loads sequentially said first software module and said second software module into said primary memory module, said primary module thereafter moves said first software module from said primary memory module to said first buffer module and consecutively programs said first flash memory module with said first software module; said primary module thereafter sends an updating instruction to said secondary module to activate a predetermined program for moving said second software module to said second buffer module, and after verifying said second software module, said second software module is written into said second flash memory module by means of said second buffer module.

[c20]   20.The digital player device of claim 19, wherein said digital player device is a DVD player.

[c21]   21.The digital player device of claim 19, wherein said primary module is a MPEG device.

[c22]   22.The digital player device of claim 19, wherein said primary memory module is a random access memory.

[c23]   23.The digital player device of claim 19, wherein said secondary module is a loader device.

[c24]   24.The digital player device of claim 19, wherein said primary module is connected with said secondary module via a bus.

[c25]   25.The digital player device of claim 24, wherein said bus is an IDE bus.

[c26]   26.The digital player device of claim 19, wherein said updating instruction set and said predetermined program are both in compliance with ATAPI protocol.

[c27]   27.An updating method for automatically updating a digital player, said digital player comprising a primary module having a primary memory module, a first buffer module, and a first flash memory module, and a secondary module having a second buffer module and a second flash memory module, said updating method is substantially accomplished by means of a first software module and a second software module carried by a disk, said updating method

comprising:

loading sequentially said first software module and said second software module into said primary memory module by means of said secondary module;

moving said first software module from said primary memory module to said first buffer module by means of said primary module, thereafter writing said first software module into said first flash memory module; and

sending an updating instruction from said primary module to said secondary module to activate a predetermined program for moving said second software module to said second buffer module, and after verifying said second software, said second software module being written into said second flash memory module by means of said second buffer module.

[c28]   28.The updating method of claim 27, wherein said digital player is a DVD player.

[c29]   29.The updating method of claim 27, wherein said primary module is a MPEG device.

[c30]   30.The updating method of claim 27, wherein said primary memory module is a random access memory.

[c31]   31.The updating method of claim 27, wherein said secondary module is a loader device.

[c32]   32.The updating method of claim 27, wherein said primary module is connected with said secondary module via a bus.

[c33]   33.The updating method of claim 32, wherein said bus is an IDE bus.

[c34]   34.The updating method of claim 27, wherein said updating instruction set and said predetermined program are both in compliance with ATAPI protocol.